In the Specification:

Please replace paragraphs [0014] – [0016], and [0019], as follows:

[0014] (Currently Amended) Referring now to Figures 1 - 4 ~~and 2~~, there is shown an embodiment of the present invention in which a tubular ~~member~~ conduit for use as an arterial shunt is formed as a coil including a plurality of substantially contiguous convolutes 16 of an elongated strand 9 that may be coated with a bioinert and preferably thermoplastic polymer. The strand 9 is wound on a mandrel 17 that has a substantially constant diameter between the ends thereof, with a protruding loop 13 formed intermediate the ends. The strand 9 is constructed from a length of suture or wire that is coated with a material such as polyvinyl chloride, polyurethane, silicone rubber, or the like. The center of the length of strand 9 is formed into the loop 13 of length approximately 5cm. The two strands at the bottom of the loop 13 may be held together by a tie 15 such as a band heat-sealed to the strands, or by a length of heat shrink tubing, or by a suture winding, or held together by adhesive, or by welding a length of adjacent strands together using heat or solvent bonding, or the like.

[0015] (Currently Amended) The strand 9 with its formed center loop 13 is continuously wound around a rod-like mandrel 17, as shown in Figures 2 and 3, with adjacent convolutes 16 of the coil substantially in contact with one another.

The ends of the strand 9 are temporarily held onto the mandrel 17 using clips, clamps, elastic bands, sutures, or the like, as shown in Figure 3. The adjacent convolutes 16 of the continuously coiled and looped strand 9 are then bonded together by heating and pressing the thermoplastic coating, or by adhesive bonding or solvent bonding or by surface coating, or the like, to form the tubular, liquid-impervious conduit 19 that serves as the arterial shunt, as shown in Figure 4. Expanded bulbous ends may be formed on the distal ends of the conduit or shunt by expanding a corresponding portion of the mandrel 17, as shown in Figures 6a-6c, prior to winding and bonding of the coiled and looped strand. The ends of the mandrel 17 may then be contracted to allow release of the bonded shunt 19.

[0016] (Currently Amended) The conduit or shunt 19 may also be formed with varying pitch of adjacent convolutes 16 along the tubular length thereof to promote varied flexibility between the ends. As shown, for example, in Figure 8, greater bending occurs near the center and ends as the shunt 19 is inserted into the artery or vessel 29. Also, the shunt 19 may be formed of the strand wound in opposite directions between the protrusion and each end, or may be formed with tapering cross section between the ends, for example, to establish a selected pressure drop through the shunt where desirable in certain surgical environments. Additionally, shunt 19 may be formed of a strand 9 that is disposed, for example, along a serpentine pattern from end to end, or from center to each end, about the entire periphery of the tubular shunt 19. Also, the loop ~~15~~13 may be

disposed closer to one of the spaced ends to facilitate ~~earlier~~ easier insertion of the shunt into an artery. In another embodiment, the ends of the strand 9 may be routed through the tubular conduit 19 from the spaced ends to be brought out through a central portion of the tubular ~~member~~ conduit 19 as the protrusion on which tensile force is exerted in order to ~~dissemble~~ disassemble the shunt inwardly from the spaced ends toward the center.

[0019] (Currently Amended) In operation, and with reference to the flow chart of Figure 7 and the sectional view of Figure 8, the tubular conduit 9 is sufficiently flexible and resilient when formed as previously described to facilitate reasonably easy insertion 36 of the ends through an aperture 27 in a ~~vessel~~ wall of artery or vessel 29. Then, by manipulating extension of the remote ends of the tubular conduit 19 into upstream and downstream positions 30, 32 relative to the vascular aperture 27, the tubular conduit 19 can be so positioned 38 to serve as a vascular shunt through the region of the aperture 27 to promote continued blood flow ~~during vascular surgery 40~~ through the inside of the convolutes during vascular surgery 40 for the reconstruction or formation of a vascular bypass on the target vessel 29 ~~proceeds~~. The integral loop 13 remains protruding through the vascular aperture 27 and through a partially completed anastomosis 42 (not shown) to facilitate later removal of the shunt 19 from within the vessel 29.